

0.8%), TVR (3.9 vs 2.8%), death (2.2 vs 2.8%), and MACE (6.1 vs 5.7%) as those without prior angina ($P=NS$ for all). Further, during 1-year follow-up, no difference was found in the incidence of death (4.7 vs 5.6%, $p=0.60$) or MACE (23 vs 17%, $p=0.07$) between patients with and those without prior angina.

Conclusions: A history of angina prior to acute myocardial infarction does not confer protection from adverse outcomes in patients undergoing primary angioplasty. Our findings challenge the clinical relevance of ischemic pre-conditioning in such patients.

POSTER SESSION

1101 Risk Assessment and Management of Acute Coronary Syndromes: Insights From Large Databases

Monday, March 18, 2002, Noon-2:00 p.m.

Georgia World Congress Center, Hall G

Presentation Hour: 1:00 p.m.-2:00 p.m.

1101-33

Characteristics and Outcome of Patients With ST Elevation Versus Non-ST Elevation Myocardial Infarction: Results of the MONICA Augsburg Myocardial Infarction Registry 1985-1995

Bernhard Kuch, Heinz D. Bolte, Wolfgang von Scheidt, Hannelore Löwel, *I. Medizinische Klinik, Klinikum Augsburg, Augsburg, Germany, GSF-Forschungsinstitut, Neuherberg, Germany.*

Background: The classification of myocardial infarction (MI) has been more and more moved from discerning Q-wave from Non-Q-wave MI to classifying MI by ST-wave dynamics. Data about patient (pat.) characteristics and prognosis in relation to their ST-wave dynamics are scarce. **Methods and Results:** We, therefore, analyzed ECG-data (Minnesota-Coding) from the MONICA Augsburg Myocardial Infarction-Registry from 1985-1995 ($n=2896$; aged 25-75 years; 74% men). ST-Elevation MI (ST-E) was most frequent (59%), followed by MI with unspecific ST-changes (neither elevation nor depression; ST-U; 25%) and MI with ST-depression (ST-D; 16%). Pat. with ST-D were more often diabetics than pat. with ST-E or ST-U (28.1 vs. 21.9 and 20.5%; respectively), were more often female (31.5 vs. 26.3 and 19.7%), had more often a history of angina (47.3 vs. 36.7 and 40.0%) and previous MI (27.6 vs. 19.5 and 23.9%), and were less often treated by thrombolytics (13.6 vs. 38.8 and 12.4%; p for all comparisons <0.001). In addition, pat. with ST-D were significantly older, had a higher mean pulse rate during admission, and a lower peak CK level than pat. with ST-E ($p<0.01$ respectively). The 28-day-case fatality-rate was 13.2% for ST-D, 10.8% for ST-E, and 7.5% for ST-U, respectively (significance only for ST-E vs. ST-U; $p<0.001$; for ST-E vs. ST-D $p>0.1$). These case-fatality differences were not altered substantially by multivariate testing in a logistic regression model including the above mentioned differences in history and therapy. **Conclusion:** 25% of MI-pat. had a non-diagnostic ECG. This group has the lowest mortality. Despite significant differences in presentation and cardiovascular risk-factor history, pat. with ST-elevation did not differ in terms of short-term prognosis from pat. with ST-depression.

1101-34

Opportunities for Enhancing the Use of Evidence-Based Medicines for Acute Coronary Syndromes: Insights From the SYMPHONY Studies

Judith Kramer, L. Kristin Newby, John Simes, Frans Van de Werf, Christopher Granger, Kerry Lee, Manjushri Bhapkar, Robert Califf, Paul W. Armstrong, *University of Alberta, Edmonton, Alberta, Canada, Duke Clinical Research Institute, Durham, North Carolina.*

The extent to which evidence-based therapy [Class IA or IB evidence (AHA/ACC 9/2000 and ESC 9/2000)] is applied internationally to the broad cross-section of patients early after acute coronary syndromes (ACS) is unknown. Accordingly, we evaluated this issue in 15,904 patients from 36 countries entered into the Symphony and 2nd Symphony studies of sibralfiban between Aug 1997 and Aug 1999. We analyzed by geographic region the use of concomitant medications between each patient's qualifying ACS event and start of study treatment (median 91 hrs); and to what extent international variations in treatment could be explained by differences in patient risk profile. The data are shown in the Table.

There were important variations in evidence-based treatment of ACS across geographic region, which remained highly significant ($p<0.001$) after adjustment for all major patient risk factors for future coronary events. Given the greater use of some treatments but lesser use of others within the same region, we believe these findings are unlikely to be driven by cost alone. Our data also indicate substantial global opportunities for improving secondary prevention. Hence continued monitoring of these international patterns of care and development of appropriate interventions to increase adherence to evidence-based guidelines is a desirable next step.

Med Class	Asia	L.America	E.Europe	W.Europe	USA	Canada	Au/NZ
	n=551	n=557	n=2661	n=3431	n=7185	n=871	n=648
ASA	87%	86%	75%	82%	85%	88%	91%
Beta blockers	68%	75%	70%	69%	73%	78%	75%
Lipid lowering	37%	17%	10%	30%	40%	29%	42%
ACE inhibitors	56%	50%	48%	30%	33%	36%	33%
Heparin	37%	61%	55%	52%	78%	79%	51%
LMWH	27%	16%	28%	34%	10%	11%	34%

1101-35

Early Use of Glycoprotein 2b3a Inhibitors and Outcomes in Non-ST Elevation MI: Observations From the NRM-4

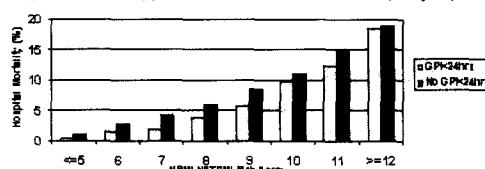
Eric D. Peterson, John G. Canto, Charles V. Pollack, Lori Parsons, Matt T. Roe, Kathee Littrell, Nathan R. Every, Hal V. Barron, for the NRM-4 Investigators, *Duke Clinical Research Institute, Durham, North Carolina.*

Background: The recent AHA/ACC ACS Guidelines recommend early use of glycoprotein IIb/IIIa inhibitors (GP 2b3a) in non-ST elevation MI (NSTEMI) patients, yet community adoption has been slow.

Methods: We examined the relationship between "early use" of GP 2b3a within 24hrs of admission and in-hospital mortality in 32,710 NSTEMI patients eligible for GP 2b3a, treated at 1,087 hospitals in the NRM-4 Registry between July 2000-April 2001.

Results: Overall, 24% of eligible NSTEMI patients were begun on a GP 2b3a in <24 hrs. Patients treated with GP 2b3a <24 hrs were younger, more likely male, and had chest pain and ST depression on presentation than those not. Unadjusted in-hospital mortality rate was significantly lower in those treated with GP 2b3a <24 hrs than those not treated early (3.2% vs 8.5%, $p<0.0001$). After adjusting for 13 patient risk factors (NRM-4 NSTEMI risk model, C-index 0.75), and for hospital size, region, teaching affiliation and cath facilities, patients getting GP 2b3a <24 hrs had 32% lower relative risk for in-hospital mortality (adjusted OR 0.68, 95% CI 0.59-0.79). Adjustment for treatment propensity (to receive GP 2b3a <24 hrs) revealed similar results. The Figure displays mortality rates by GP2b3a use <24 hrs according to NRM-4 risk group.

Conclusion: Early use of GP 2b3a within 24 hrs of admission was associated with lower in-hospital mortality across the NSTEMI risk spectrum. As only 24% of eligible patients received early GP2b3a therapy, there is considerable room for quality improvement.



1101-36

Comparison of Characteristics, Treatment, and Outcomes of Patients Enrolled Versus Not Enrolled in a Clinical Trial: Findings From TIMI 9 Registry and 9B Trial

Maria Cecilia Bahit, Elliott M. Antman, Sabina A. Murphy, Carolyn H. McCabe, Christopher P. Cannon, *Brigham and Women's Hospital, Boston, Massachusetts.*

Background: Because mortality in clinical trials (CT) is generally lower than in registries of clinical practice, it has been suspected that patients are lower risk. However, little is known about the characteristics of patients included vs. not in CT. **Methods:** To address this issue, TIMI 9 Registry prospectively evaluated characteristics and in-hospital outcomes for ST-elevation MI patients at 20 hospitals during the conduct of TIMI 9B trial. We compared characteristics, treatment and outcomes of patients in TIMI 9B trial ($N=3002$), with others eligible for thrombolysis but not enrolled in the TIMI 9B trial ($N=296$), and with those not-eligible for thrombolysis by ACC/AHA criteria at the same centers ($N=282$). **Results:** At TIMI 9 Registry hospitals, 46% of eligible patients were enrolled in TIMI 9B. Across the three groups, a gradient of both high-risk baseline characteristics, use of reperfusion therapy and mortality was observed. In addition, although we did not assess contraindications for each medication, use of aspirin, (and beta-blockers, ACE inhibitors) both initially and at discharge was lower among eligible/not enrolled patients ($p<0.0001$ for aspirin) or ineligible patients (Table).

Conclusion: In this prospective registry, we found that half of eligible patients were enrolled. Those not enrolled had higher risk characteristics and worse outcomes; however, they also were treated less frequently with guideline-recommended medications, which may have contributed to their higher mortality.

	Eligible/enrolled	Eligible/not enrolled	Not eligible/not enrolled	3-way p
Age (years)	60.1 ± 11.9	62.3 ± 13.5	67.5 ± 12.6	<0.0001
Female gender	25.1%	32.4%	39.5%	<0.0001
Aspirin	99.4%	91.5%	75.2%	<0.0001
Thrombolysis	99.6%	59.8%	22.5%	<0.0001
Primary PCI	0	12.5%	12.7%	<0.0001
In hospital death	5.1%	8.4%	19.8%	<0.0001
Death + MI+ Shock+ severe CHF	9.0%	15.9%	30.1%	<0.0001

1101-37

Approach After Thrombolytic Therapy: Invasive Versus Conservative Management: Global Registry of Acute Coronary Events

Imdad Sadig, Harold L. Dauerman, Robert J. Goldberg, Werner Klein, David Brieger, Ph. Gabriel Steg, Gilles Montalescot, José López-Sendón, Andrzej Budaj, Joel M. Gore, for the GRACE Investigators, *Saint Vincent Hospital & University of Massachusetts Medical School, Worcester, Massachusetts, Medizinische Universitätsklinik, Graz, Austria.*

Background: Thrombolytics (lytics) reduce mortality of patients (pts) with acute ST segment elevation MI (STE MI). However, the impact of a subsequent invasive strategy on outcomes has not been studied in an international population-based setting.

Methods: 1,766 pts enrolled in GRACE with STE MI who received lytics were divided into